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Cued Speech

An independent study

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Learning Cued Speech

Learning all of the handshapes or vowel placements wasn't hard, but recalling them within the seconds it takes to say a sentence was. Also, there are several rules to remember while cueing. Diphthong rules are the hardest to keep in mind. When cueing /i-e/, /ou/, /a-e/, and /oi/, one has to remember to open your hand as it moves toward the chest. Another difficult vowel rule to remember is to move your hand up and down when saying /u/ and out and back when saying /-o-/ and /oa/. Of course, only the most experienced cuer would notice if a person was to forget these rules.

Coarticulation is something else to consider when cueing. We're supposed to cue like we talk. We don't enunciate every vowel or consonant as we speak. Nor should we cue like we're enunciating. If you say 'watur' for 'water', then cue it like you pronounce it. Remembering that is hard.

Coarticulation in sentences is something I have yet to master. Just like we don't articulate each word, we don't always articulate our sentences, either. Often, one word will blend into another. Usually, I say 'Let'sgohome', blending all of my words together instead of saying them as three separate units. If I say it like that, I'm supposed to cue it that way, too. I'm still at the word level with my

cueing - I take one word at a time. Considering more than that right now is an impossibility.

The one easy thing about cueing is remembering to do it in syllables. With a vowel and a consonant being cued in the same place, that is one rule that isn't hard to forget.

The books and articles I have read say that most people become proficient cuers in about three to four months. It is not stated if receptive skills are included in that estimate. With constant cueing, I believe I could become proficient in three or four months. I do not think I could read someone else's cues in three months and tell that person if they were doing it right or wrong.

As of right now, cueing is painfully slow for me. Every word requires several seconds to cue. This slows my rate of speech down considerably. However, the staccato effect will diminish with time. In the long term, I could see becoming frustrated with this. I sound like a talking computer because my speech is so telegraphic.

I do think my knowledge of phonetics helped learning Cued Speech. Learning how to transcribe last year taught me to think of words in terms of sounds, not letters.

In the beginning, my mom watched the cueing tapes with me. It became difficult very quickly for her. Cueing requires a person to think of the vowel before the consonant in order to place it correctly, which is tough for a person who has never had to make a word apart and look at the sounds.

Finally, I will disclose the bad habit I picked up while learning to cue. It is recommended that a person cues with their non-dominant hand. This is in case you ever find yourself writing and cueing at the same time. The amount of grace and self-control that would require I will never have. I have cued with my dominant hand since the beginning.

I'm glad I chose to learn Cued Speech. My skill with this will probably diminish quite rapidly, since I am not learning this code to communicate with any one. I probably would have been more motivated had I been in a rush to pass this information onto someone else.

Orin Cornett was director of the Division of Educational Organization and Administration in the United States office of Education when he became aware of the low average reading comprehension rate among the prelingually deaf. The report he read stated that their average reading comprehension at ages 15 to 18 years was about that of a normal hearing eight year old and the statistics had been the same for about 50 years. "Since reading provides essential access to learning about a world that is relatively inaccessible to hearing impaired/deaf people via radio and television, Dr. Cornett had supposed that most hearing impaired/deaf people were bookworms" (Metzger & Fleetwood).

As Cornett began to put the pieces together about why the reading comprehension rate was so low, a position became available at Gallaudet College, now Gallaudet University. Cornett asked to be considered for the position. In August 1965, Cornett became the Vice President for Long-Range Planning at Gallaudet College. That is when he began working on a new approach in deaf communication.

"After a few months, Dr. Cornett concluded that the problem hearing impaired/deaf people had with reading was linked to their relative inability to effectively access the spoken form of printed language. Without a clear understanding of a given spoken language, its printed counterpart is just as meaningless" (Metzger & Fleetwood). Cornett first wrote out a list of concepts that he thought would be essential in this new form of communication. He combined the beliefs of oralists and those who stressed

"clear communication", although it isn't specifically stated who those people are.

1. English should be the language used with the deaf child.
2. Lipreading must be an essential component. Supplementary information must be useless without lipreading.
3. The method of communication should have a phonemic base, and it should help in identifying syllables.
4. It should help the deaf person's speech become more intelligible and increase their lipreading abilities without special instruction.
5. It must be learnable by the very young prelingually deaf child through use by its parents.
6. It must facilitate rapid and accurate communication.
7. It must be usable in a classroom environment up to a distance of 20 feet.
(Cornett & Daisey, 745)

Cornett had to come up with a method other than sign to communicate. He couldn't figure out how signing deaf children learned the English language. As he thought more about this new form of communication, Cornett kept three questions in mind: Why do most deaf children not become good readers?, How do signing deaf students learn English?, and Why do signing deaf teachers speak and sign at the same time?. He wanted the new method to consider these issues.

After he wrote out this list, he began to think of ways to reduce confusion in lipreading. When a word was simply lipread, there were too many other words that looked exactly the same on the lips. For example: if MET is said, and a person lipreads

that word, it is possible that it could be perceived as met, bet, pet, mit, pit, bit, mutt, but, putt, meet, beet, meant, meat, mend, etc. Cornett came up with 71 words or word-like combinations that looked the same on the lips as met (Cornett & Daisey, 23). He wanted to find a communication system that reduced the number of word choices in lipreading a word. Cued Speech eliminates the number of choices because it forces the deaf child to use context to figure out a word.

Cued speech is a phonemically-based hand system that is used in conjunction with lipreading. The cues have no meaning without the lip movements. Since one cue represents three consonant sounds, the lip movements are essential in making a decision which of the three consonant sounds the speaker is using (Wilbur, 225).

Eight handshapes represent the English consonant sounds and four positions around the face represent the vowel sounds. For example: handshape #5, with all of the fingers extended, is the cue for the sounds /m/, /f/, and /t/. These sounds all look different when they are lipread. If a word is said and cued, and all three of the words are legitimate words, the cued speech receiver can determine what word the speaker intends by context. For example: I walked a _____ last night. While file and tile are legitimate words, neither of them fit into the context of that sentence, therefore, mile is the only possible option.

Each position around the face represents two or three vowel sounds. For example, placing the open hand next to the corner of the mouth represents the sounds

/ur/ and /ee/.

These handshapes and face positions aren't cued separately. Like consonant and vowel sounds forming words, the handshapes and face positions run together to form syllables and/or short words. To cue the word "he", the handshape for /h/ is cued at the face position of the vowel /ee/. So, at the corner of the mouth, where /ee/ is located, one would cue handshape #3, a shape we all commonly know as the 'okay' gesture. If you want to cue the word "heater", simply cue 'he', then place your open hand by the corner of your mouth for the /tur/ syllable.

For people to communicate in Cued Speech, usually the hearing person, the parent, will cue to the child. The child will talk back to the hearing person, without the use of cues. The child might cue back occasionally, to confirm the phonetic pronunciation of a new word. Deaf children may cue to each other when they don't understand what the other one is saying.

Cued speech does facilitate rapid communication, in that it is quicker than fingerspelling. While fingerspelling gives all of the letters conveyed in a message, cued speech combines the phonemes of syllables into words so the reader knows how the word is pronounced. Fingerspelling gives no indication of how a word is to be pronounced. With so many words in the English language being exceptions to general phonetic rules (for example: bead and dead), a deaf person needs additional information to determine correct word pronunciation.

Also, using Cued Speech with a deaf child can convey all of the environmental and onomapoetic sounds that usually aren't explainable to a deaf child. It is possible to cue the 'chirp, chirp' of a bird, or the 'crash!' sound that occurs when two cars collide. Rhythm, duration, and accent are other things that can be conveyed via Cued Speech. Thinking of nursery rhymes, one can cue the prosodic elements of "the it see bit see spider" song, as well as the difference between a Midwestern and a Southern accent, although one would have to be an excellent cuer as well as having a great 'ear' to notice the specific differences in those two styles of speech.

In order to add credence to Cornett's discovery of Cued Speech, he interviewed 400 students who used sign language to communicate. He wanted to determine how a signing deaf child processed information. He asked them a question using sign, "I want you to work on your notebook now". The word notebook was not signed, but fingerspelled. After asking this question, Cornett asked the students how they interpreted the information in the question. Did they hear the words in their minds, say the words, see them, or write them? To all of these questions, the students answered no - except to seeing the words. Some of the students stated they saw the word notebook in their minds. This supported Cornett's belief that using sign language was not a good way to teach English - it did not leave a permanent connection between the sign itself and the word it is associated with. "The problem is that subsequent communication in signs, using the specific signs associated with English words the child

has been taught, does not bring those English words to the child's mind again! Once a new word is learned, if subsequently it does not come to the mind again for several days, it will be forgotten, and must be relearned" (Cornett, 3). The implications of this was it would impair the deaf child from getting enough exposure to English, which is necessary for the acquisition of reading and writing.

Often, when having a conversation with a deaf child, it will become apparent that there are some gaps in their language. Since they cannot acquire language as hearing people do, deaf children often have to rely on experiences with concrete objects in order to add to their language base. Later, as a hearing child grows up and their language grows, they can learn new language by use of their established language. For example: If a hearing high school student hasn't ever been introduced to the theory of relativity, another person can explain it to him/her using language and concepts they already understand. Explaining this concept to a deaf high school student might take much longer to explain, because of their limited language base and the inability to present a solid concrete object to explain such a complex topic.

One of Cornett's objectives for Cued Speech was to provide a young deaf child with an opportunity for mental and linguistic development closer to their hearing peers. "The prime function of Cued Speech during the early years is language development through easy, clear communication" (Cornett & Daisey, 147). Everything that is said is cued. By seeing each element of spoken language repeatedly and clearly, a Cued

Speech child builds his/her language base much like a hearing child. Through 'hearing' everything that people say, slowly the child will internalize it and begin producing those same structures on his own, in spoken and written form.

Signing only confuses the message. For a signing child to learn written words, the teacher or parent has to sign the word, which the child already knows, then break it down further to fingerspell or write the word. The language signing deaf people speak is not the same one they write. This can be difficult for a child to comprehend.

Alexander Graham Bell commented on this: "I think there is only one royal road to the learning of a language, and that is to use it for the communication of thought without translating it into any other language. The moment you teach one language through another the pupil thinks in the one language and translates into the other. You must use the language without translation, and I hold that any language that is used in the presence of deaf children will be acquired by them by imitation if the language is clearly presented to their senses." (Cornett & Daisey, 152). Any person who has ever tried to learn a foreign language can relate to this quote - when hearing a sentence in that foreign tongue, you had to translate it back into English, think about your reply, then translate your reply back into that foreign language.

Cornett believes that teaching language to a deaf child through the Cued Speech method requires less time than other methods. Because Cued Speech presents spoken language accurately, words and phrases appear in a clear form and can be easily

associated with a concept (Cornett & Daisey, 156).

Some deaf students have trouble mastering the use of verb endings. One study I read cited another one that stated, ". . . knowledge of morphology in orally educated deaf students conclude that 19 year old deaf subjects fail to reach the level of 9 year old hearing controls" (Hage, Alegria, & Perier, 396). With Cued Speech, the child 'sees' the verb endings represented in the hand and mouth shapes.

There are very few Cued Speech programs in the world. Most of them are housed in schools for the deaf - with one or two classrooms being taught in Cued Speech while the rest of the school communicates by sign or speech only. Students who use Cued Speech usually mainstream by second or third grade. Along with them in the mainstreamed program goes a Cued Speech transliterator. A transliterator's job is to convey exactly what is said in the classroom. He/she does not alter the language level of what is being said, it is only cued. A mainstreamed student will also probably go out a few hours a week for resource help, auditory training, and speech.

Advocates of Cued Speech believe that the single most important requirement for successful mainstreaming of a severe to profoundly deaf child is reading level. "This is a stringent requirement, but a deaf child in a regular classroom must learn a large share of what he or she learns through reading" (Cornett & Daisey, 387). It is preferable that the student's reading ability is within one year of the students in the mainstreamed classroom.

Teaching reading to a child using Cued Speech is similar to teaching them language - they just pick it up. Supposedly. Somehow, this lipreading supplement is so clear to these children that language and reading are not a problem. ". . . because a deaf child growing up on Cued Speech should learn to read in exactly the same way and at the same rate as a hearing child" (Cornett & Daisey, 256). Cornett's justification for this is that "Cued Speech enables the deaf child to acquire the spoken language in the same phonemic (sound) patterns a hearing child learns, but through vision rather than audition".

Cornett believes at no point should a parent stop cueing to their deaf child. "You may discontinue cueing to your child when you are ready for him to stop learning more language and improving his speech and speechreading skills. A deaf person, even in adulthood, will continue to profit from further exposure to a clear, complete presentation of spoken language" (Cornett & Daisey, 372). Cornett offers three reasons why Cued Speech remains helpful, even as an adult.

1. When a deaf person communicates through speechreading, he/she learns no new language unless the situation in which the surroundings are manipulated and the language stimuli reinforced (usually by written material) in such a way to teach new language.
2. When receiving Cued Speech, children can understand clearly and with less effort.
3. A speaking deaf person without Cued Speech is forced to depend upon hearing individuals to correct his/her errors in pronunciation and language, in order to improve.

Cornett also says as the child gets older, he/she "becomes progressively less dependent on having Cued Speech, in the sense that his/her ability to function without it when necessary continues to improve".

Some users of Cued Speech also use Total Communication as a method to communicate. In those cases, Cued Speech is used to introduce words that have no established signs or to show the difference between synonymous words (ex: fast, quick, rapid) that are all covered by the same sign. Advocates of Cued Speech believe that "the majority of deaf children should have an opportunity to become proficient in PSE (Pidgin Sign English) or signs in English word order before the age of puberty" (Cornett & Daisey, 372). This is recommended as long as the learning of sign does not prevent them from learning the language necessary to begin reading.

My feelings on Cued Speech are mixed. It seems very possible that using it would make lipreading much easier. A code that could be used to eliminate the confusion of lipreading alone would make conversing and learning less exhausting for a deaf child. How using Cued Speech makes the acquisition of language and reading skills more comparable to those of a hearing child, I don't understand. There are very few studies reported researching those areas. One book I read addressed this: "The lack of available Cued Speech research is due in part to the inability of researchers to obtain sufficient numbers of subjects. Cued Speech families or programs tend not to be clustered, and there is difficulty in properly matching subjects for background, hearing

loss, cueing experience, etc." (Kipila & Williams-Scott, 149). The fact that Cued Speech has been around for 32 years and so few people know about it also perplexes me. If it is so easy to learn and it helps deaf children acquire language quicker and easier, why don't more people use it? I think this subject deserves more research -- doing that would provide the data and figures to back up several of Cornett's unsupported claims.

Works Cited

- Cornett, Orin. (1994) Cued Speech Journal. Journal #5, North Carolina: National Cued Speech Association.
- Cornett, Orin, and Daisey, Mary E. (1992) The Cued Speech Resource Book: For Parents of Deaf Children. North Carolina: National Cued Speech Association.
- Hage, C.; Alegria, J.; and Perier, O. (1991) Cued Speech and Language Acquisition: The Case of Grammatical Gender Morpho-Phonology. In D. S. Martin. Advances in Cognition, Education, and Deafness (p. 395-398). Washington, D.C.: Gallaudet University Press.
- Kipila, Elizabeth L.; and Williams-Scott, Barbara. (1990) Cued Speech. In Harry Bornstein. Manual Communication: Implications for Education (p. 139-150). Washington, D.C.: Gallaudet University Press.
- Metzger, M and Fleetwood, E. (1991) Becoming a Proficient Cued: Workbook Practice Lessons. Maryland: Calliope Press.
- Wilbur, R. B. (1979) American Sign Language and Sign Systems. Maryland: University Park Press.